

Title (en)  
RELIABILITY ASSESSMENT DEVICE AND RELIABILITY ASSESSMENT METHOD

Title (de)  
VORRICHTUNG UND VERFAHREN ZUR ZUVERLÄSSIGKEITSBEWERTUNG

Title (fr)  
DISPOSITIF D'ÉVALUATION DE FIABILITÉ ET PROCÉDÉ D'ÉVALUATION DE FIABILITÉ

Publication  
**EP 3926545 A4 20220323 (EN)**

Application  
**EP 19921610 A 20190326**

Priority  
JP 2019012877 W 20190326

Abstract (en)  
[origin: EP3926545A1] A reliability evaluation device includes: a training data storing unit (102) for storing training data constituted by a set of data and a label, the label being information relating to the data and assigned to identify an object to be identified; a learning unit (103) for performing a dropout process on a neural network model to be learned by applying a preset dropout parameter, repeating learning for classifying the label by using the training data, and performing iterative learning until the learning converges; a model reconstructing unit (105) for reconstructing a learned model in accordance with the dropout parameter and generating a plurality of different reconstructed models, the learned model being a neural network model for which the iterative learning has converged; an identification unit (107) for identifying the training data by using the generated reconstructed models, and estimating a label for each of the reconstructed models; and a classification determining unit (109) for evaluating a label of the training data on the basis of the estimated labels, and classifying the label of the training data.

IPC 8 full level  
**G06N 3/08** (2006.01); **G06N 3/04** (2006.01)

CPC (source: EP US)  
**G06F 18/2155** (2023.01 - US); **G06F 18/24** (2023.01 - US); **G06N 3/08** (2013.01 - US); **G06N 3/082** (2013.01 - EP)

Citation (search report)

- [IY] US 6298351 B1 20011002 - CASTELLI VITTORIO [US], et al
- [Y] US 2019066290 A1 20190228 - SHAUBI OHAD [IL], et al
- [I] BO HAN ET AL: "Co-teaching: Robust Training Deep Neural Networks with Extremely Noisy Labels", ARXIV.ORG, CORNELL UNIVERSITY LIBRARY, 201 OLIN LIBRARY CORNELL UNIVERSITY ITHACA, NY 14853, 18 April 2018 (2018-04-18), XP081233304
- See also references of WO 2020194509A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3926545 A1 20211222; EP 3926545 A4 20220323**; CN 113597622 A 20211102; JP 6964822 B2 20211110; JP WO2020194509 A1 20210913; US 2021397960 A1 20211223; WO 2020194509 A1 20201001

DOCDB simple family (application)  
**EP 19921610 A 20190326**; CN 201980094303 A 20190326; JP 2019012877 W 20190326; JP 2021508472 A 20190326; US 202117462186 A 20210831